

Questions and tasks in Lecture 8

Task 8-1: Write a program that measures continuously the voltage on the ADC0 pin and dims a LED on OCR0A according to that voltage.

Bonus question: What has to be done to increase the red portion with increasing voltages and to reduce the green portion on a two-color-LED?



Questions and tasks in Lecture 8 - Continued

Task 8-2: Write a program that counts the number of power-ons that the controller has had in his lifetime and blink a LED with this number.

Bonus question: Extend the program so that if the controller had more than five power-ups the blinking rhythm enhances its speed.

Questions and tasks in Lecture 8 - Continued

Task 8-3: Write the user-terrorizing software for a machine that measures the ambient temperature when first started and that fails to start if the temperature is smaller than this on every fourth start-up. Failure shall be signalled with a blinking red LED, succesful operation with a durable green LED.